Energy Situation Analysis Report

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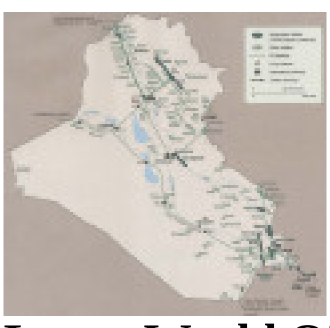

Latest World Oil Market Developments

- As of 8:45 am Tuesday, the near-month WTI futures contract was at $25.30 per barrel in overnight ACCESS trading, down $0.19 per barrel from yesterday's closing price, as the market anticipates an increase in U.S. crude oil inventories when the latest weekly data is released at 10:30 am on Wednesday.
- The near-month (June) West Texas Intermediate (WTI) crude oil futures contract on NYMEX settled at $25.49 per barrel on Monday (4/28), $0.77 per barrel below Friday's close, as the market digested last week's OPEC decision and Nigerian oil output continued to rise. more...

Production/Export/Infrastructure Developments

IRAQ: Original reports from the Office of Reconstruction and Humanitarian Assistance (ORHA) last Friday (4/25) indicated that Iraqi oil production reached 235,000 barrels per day. Recent reports, however, call into question whether this number has been achieved, particularly with reports on Monday (4/28) that oil leaks in pipelines have slowed the resumption of operations at Basra refinery in southern Iraq and on Tuesday (4/28) indicating that leaks are fixed.

- U.S. Central Command says that Iraqi's southern oilfields could be pumping at 800,000 barrels per day within 3-6 weeks, while northern oilfields could be at 800,000 barrels per day within a matter of weeks. In a separate statement, Tom Logsdon, a member of General Jay Garner's team in Iraq, recently estimated that Iraq could be pumping 1.1 million bbl/d by June 1. The current phase of the U.N. "oil-for-food" program is set to expire on June 3.

PERSIAN GULF COUNTRIES:
Oil operations in other Persian Gulf countries are normal.

Non-GULF SUPPLY: Production in Nigeria remains constrained due to ethnic unrest in the Niger Delta. The volume of production currently disrupted is estimated at around 160,000 barrels per day, with production at 2.04 million barrels per day (MMBD).

- Despite recent increases, ChevronTexaco and Shell have not reached pre-shutdown production levels at the Escravos and Forcados fields. ChervonTexaco has said it would not increase production at Escravos to the pre-shutdown level of 440,000 barrels per day until it is sure that that the region is safe.
- TotalFinaElf has shut down around 7,500 barrels per day of its Nigeria production, and has stated that it will only return when Nigeria's security situation has stabilized.
- Venezuelan production is widely believed -- by striking workers and independent analysts -- to be around 2.6 MMBD. State oil company PdVSA, on the other hand, estimates current production at over 3 MMBD, close to pre-strike output levels.

[Latest OPEC Production Table]

Oil Supply Disruption Summary

- EIA is assuming a gross supply disruption of around 1.9 MMBD from Iraq.
- Approximately 160,000 barrels per day of Nigerian production currently is shut in due to civil unrest.
- The gross oil supply disruption for these countries is estimated at 2.06 MMBD. Venezuela also continues to produce at levels below its November 2002 output, prior to strikes and unrest in that country.

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Latest U.S. Petroleum Information

- U.S. commercial crude oil inventories increased by 9.0 million barrels last week, but are still 41.6 million barrels less than last year at this time. Over the last four weeks, crude oil inventories have increased by 12.3 million barrels. Even with an increase in refinery output and strong imports, motor gasoline inventories fell by 0.7 million barrels and are below the low end of the normal range. Distillate fuel inventories, however, increased by 0.4 million barrels. As of April 18, total commercial petroleum inventories are 117.5 million barrels less than last year at this time. The top sources of U.S. crude oil imports in February 2003 were: Mexico (1.495 million barrels per day), Canada (1.423 million barrels per day), and Saudi Arabia (1.397 million barrels per day).
- The U.S. average retail price for regular gasoline fell last week for the sixth week in a row. Prices dropped by 1.7 cents per gallon as of April 28 to hit 155.7 cents per gallon, which is still 16.4 cents per gallon higher than a year ago. Over the last five weeks, the average price for regular gasoline has declined by 17.1 cents per gallon. The recent reductions in gasoline prices are largely due to continuing decreases in crude oil prices.

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For background information concerning previous oil supply disruptions, energy supply vulnerability, infrastructure, and more. The current featured "special topics" provides a discussion of gasoline pricing behavior and a summary of Iraq's oil infrastructure.

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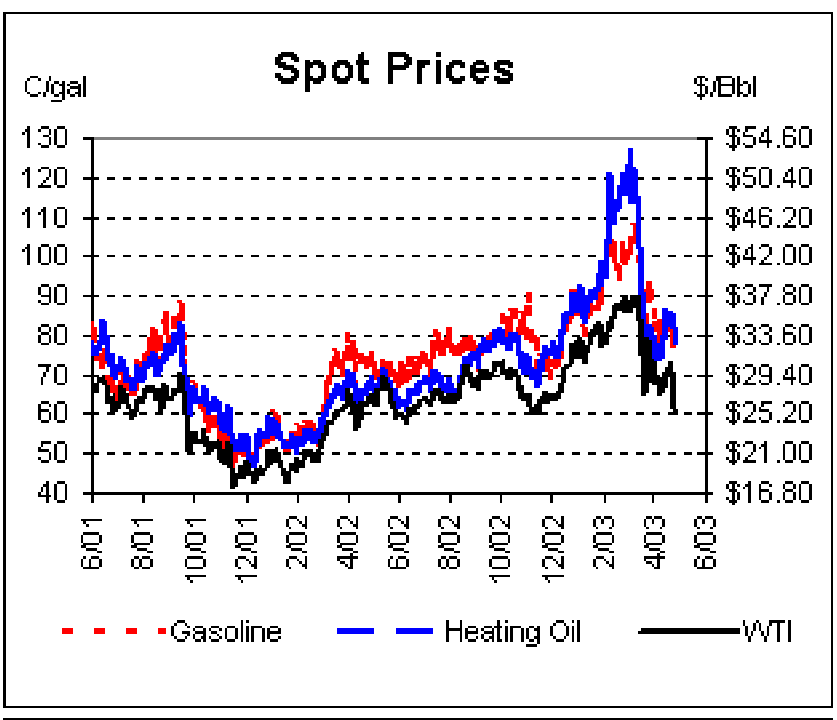
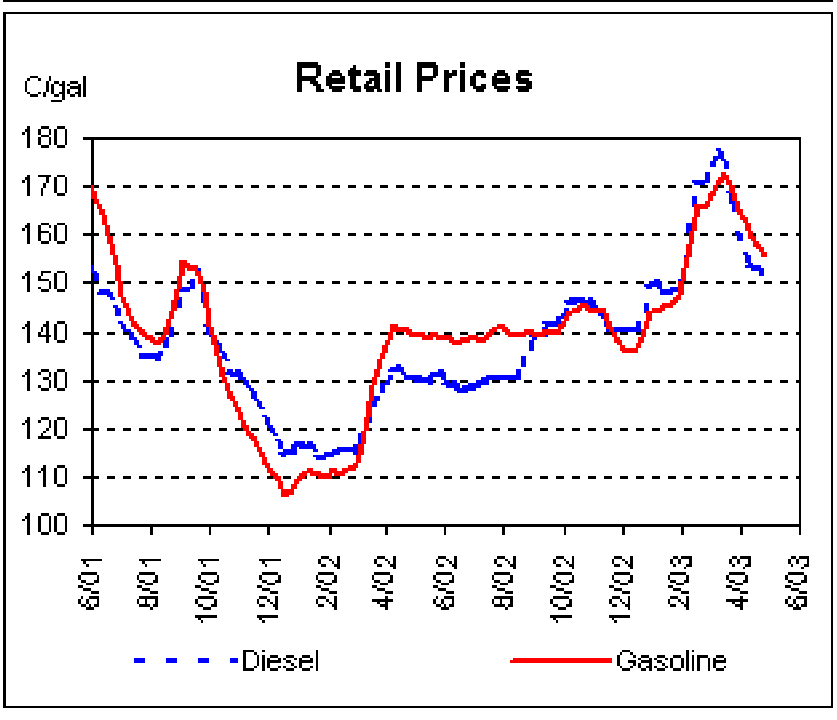
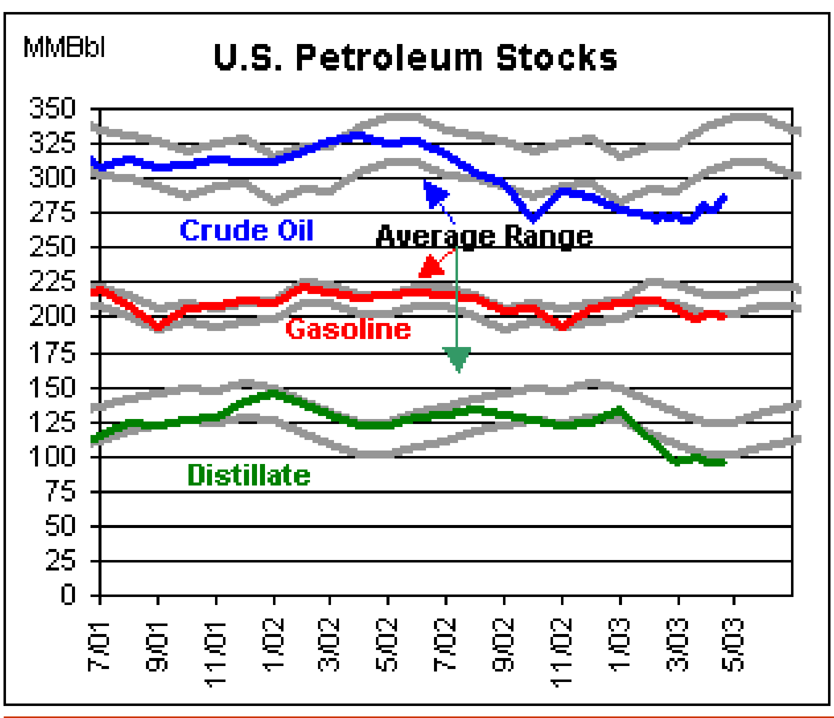
Energy Prices*

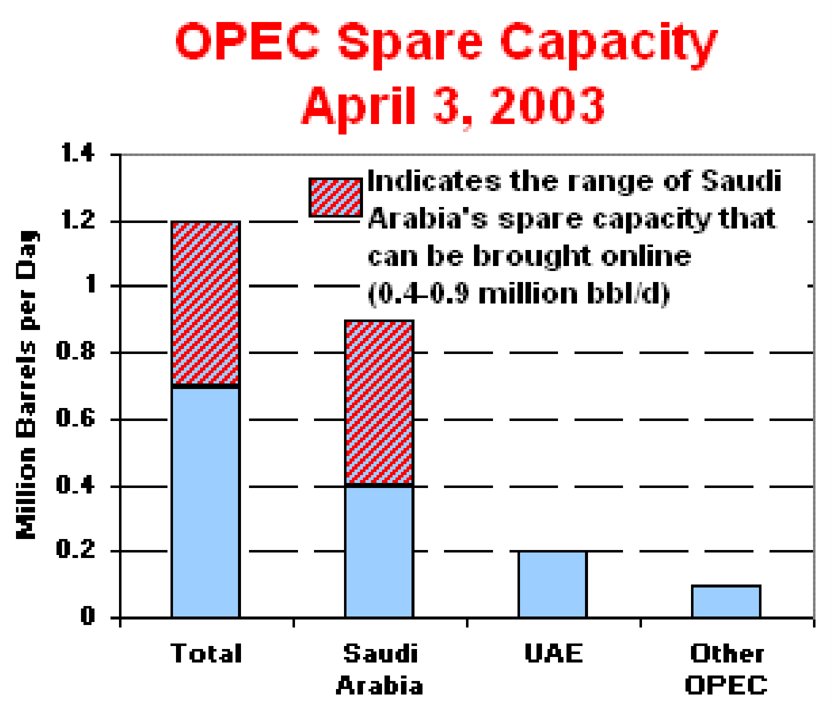
NYMEX Futures	4/28/03	4/25/03	Change	3/12/03
WTI ($/Bbl)	25.49	26.26	-0.77	37.83
Gasoline (C/gal)	84.24	88.36	-4.12	111.39
Heating Oil (C/gal)	73.14	76.60	-3.46	103.52
Natural Gas ($/MMBtu)	5.12	5.48	-0.35	5.87
Spot Prices				
WTI (Cushing, OK)	25.25	25.92	-0.67	37.87
Gasoline (NYH)	74.00	78.38	-4.38	105.08
Heating Oil (NYH)	78.20	82.05	-3.85	115.45
Jet Fuel (NYH)	76.45	80.80	-4.35	112.45
Natural Gas (Henry Hub)	5.30	5.39	-0.09	5.80

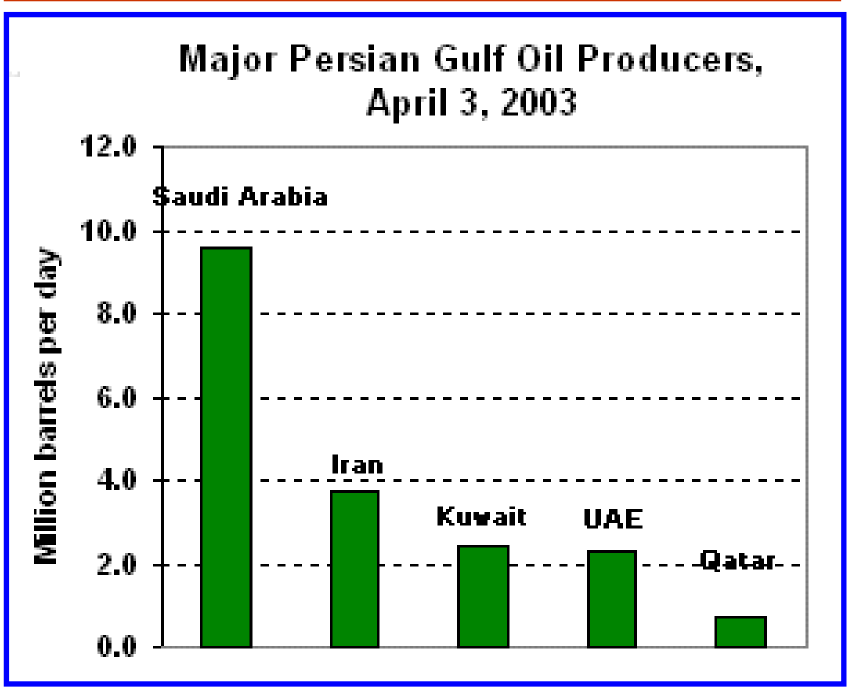
*Definitions

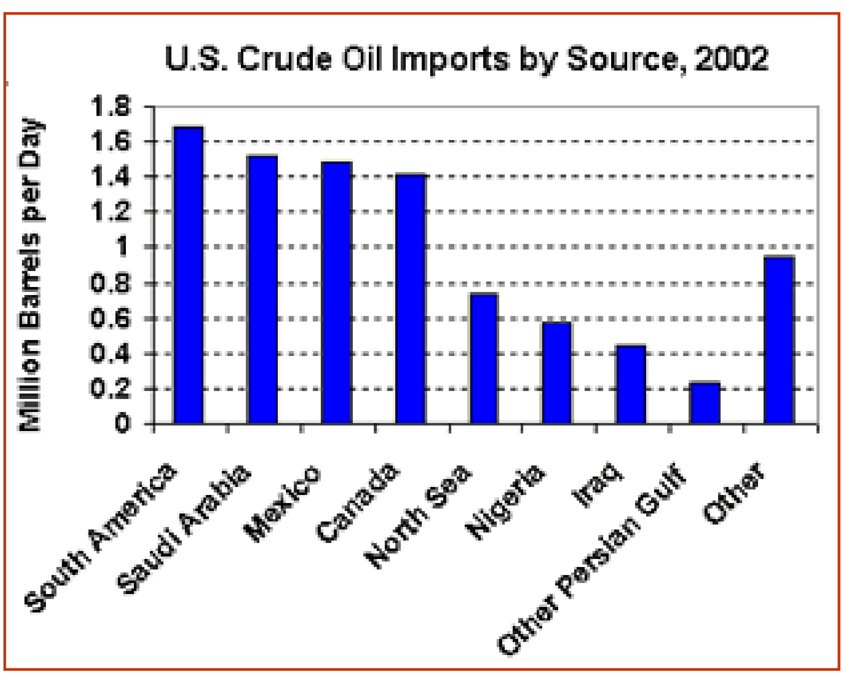


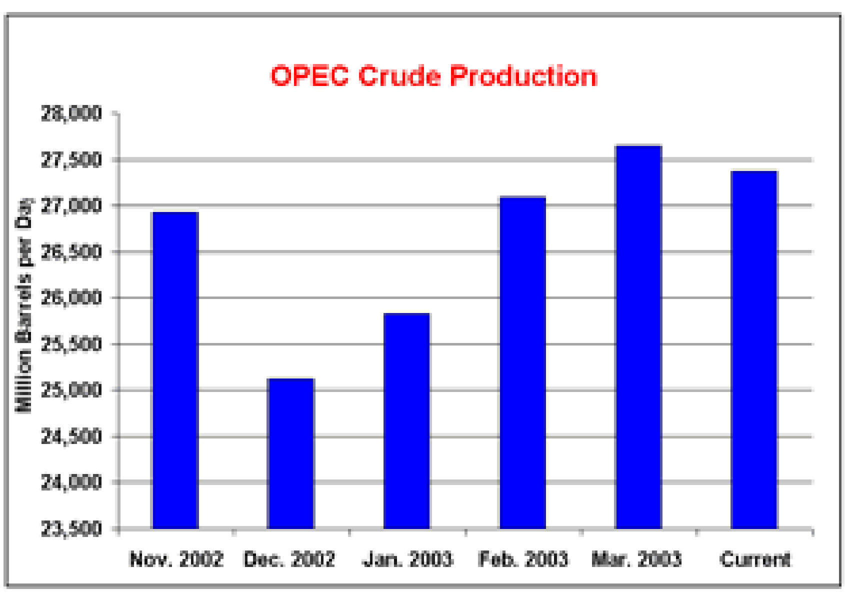












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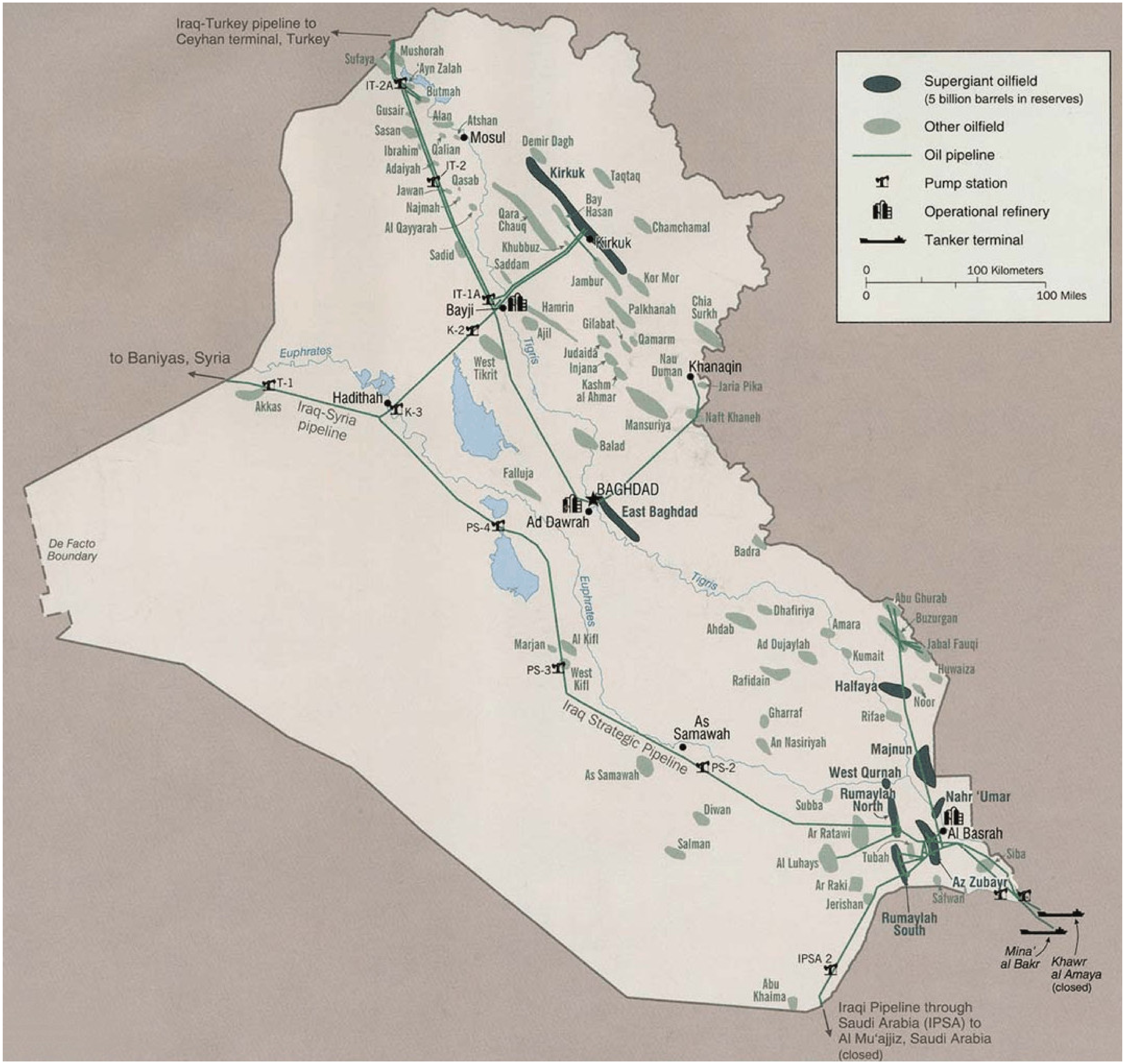

Latest Oil Market Developments

(updated April 29, 2003)

The near-month (June) West Texas Intermediate (WTI) crude oil futures contract on NYMEX settled at $25.49 per barrel on Monday (4/29), $0.77 per barrel below Friday's close, as the market digested last week's OPEC decision and Nigerian oil output continued to rise. WTI has now fallen 33%, or about $12.34 per barrel, from its pre-war peak on March 3, 2003.

As of 8:45 am Tuesday, the near-month WTI futures contract was at $25.30 per barrel in overnight ACCESS trading, down $0.19 per barrel from yesterday's closing price, as the market anticipates an increase in U.S. crude oil inventories when the latest weekly data is released at 10:30 am on Wednesday. Also weighing on the market are recent downward revisions in the near-term outlook for global oil demand, with the SARS virus alone expected to reduce oil demand in Asia by as much as 300,000 barrels per day according to some estimates, due to a slump in air travel in the region.

In U.S. product markets overnight, as of 8:45 am Tuesday, the near-month gasoline futures contract was at 83.41 cents per gallon, down 0.83 cent per gallon from yesterday's closing price, while the near-month heating oil futures contract was at 72.75 cents per gallon, down 0.39 cent per gallon from yesterday's closing price. Both product prices are down in conjunction with the decrease in the WTI price.

Other issues related to **world oil markets** include:

- The Office of Reconstruction and Humanitarian Assistance reported on Tuesday (4/29) that the leaks in the pipelines leading to Basra refinery have been repaired and should resume a flow of somewhere between 15,000 barrels a day (bbl/d) and 75,000 bbl/d.
- Nigeria's oil production is currently estimated at 2.04 million barrels per day, with a total of around 160,000 barrels per day still shut-in by ChevronTexaco, Shell, and TotalFinaElf (4/28).
- Shell of Nigeria announced on Monday (4/28) that there have been threats to set fire to the Sea Eagle, an offshore 170,000 bbl/d production facility.
- Nigeria's Department of Petroleum Resources stated on Monday that Nigeria has increased its crude oil reserves to 33 billion barrels.
- PDVSA, Venezuela's state-owned oil company, reported on Monday that a fire has shut down one of the hydrodesulphurisation units at Venezuela's giant 940,000 bbl/d Amuay-Cardon oil refinery.
- Russia's Lukoil reported on Monday that it increased its proven oil and gas reserves by 15% through acquisitions and new discoveries. Lukoil now claims to be the second largest oil company in the world after ExxonMobil with 19.7 billion barrels of oil equivalent.
- OPEC ministers agreed last Thursday (4/24) to cut 2 million bbl/d from their output estimate of 27.4 million bbl/d. OPEC decided to raise temporarily its output ceiling to 25.4 million bbl/d from 24.5 million bbl/d. The increased ceiling would be effective June 1.
- As of April 29, 2003, the US Strategic Petroleum Reserve (SPR) contained 599.5 million barrels of oil. The SPR has a maximum drawdown capability of 4.3 million bbl/d for 90 days, with oil beginning to arrive in the marketplace 15 days after a presidential decision to initiate a drawdown. The SPR drawdown rate declines to 3.2 million bbl/d from days 91-120, to 2.2 million bbl/d for days 121-150, and to 1.3 million bbl/d for days 151-180.

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Latest Oil Supply Disruption Information

(updated April 29, 2003)

For the time being, EIA is assuming that the flow of Iraqi oil exports has been stopped, resulting in a gross Middle Eastern oil supply disruption of around 1.9 million barrels per day (bbl/d). Meanwhile, Nigeria is experiencing a gross oil supply disruption of about 160,000 barrels per day. In total, around 2.06 million bbl/d of oil production from Iraq and Nigeria is currently offline, with remaining OPEC spare production capacity estimated at 0.7-1.2 million bbl/d.

Major Gross Oil Supply Disruptions (million barrels per day)

	3/19/03	Latest (4/29/03)
Middle East*	1.8	1.9
Nigeria	0.0	0.16
TOTAL	1.8	2.06

*The Middle Eastern gross oil supply disruption is based on the loss of Iraqi exports from the UN "oil-for-food" program, which averaged 1.73 million bbl/d in February 2003, plus around 200,000 bbl/d of "illegal" oil exports through Syria and Jordan. As of March 31, Shell has restarted the 60,000-bbl/d Soroosh oil field in Iran's northern Gulf, reducing the gross oil supply disruption by that amount. Soroosh had been closed since just prior to the outbreak of war with Iraq.

World Oil Supply (million bbl/d)

	Prior to Disruption March 2003 (Base Case)	Latest Estimate
OPEC-10 Production	25.3	27.14
Iraqi Production	2.3	0.235
Surplus Capacity	1.5-2.0	0.7-1.2

Note: For a more detailed analysis of OPEC production prior to disruption, see EIA's OPEC Fact Sheet. For an overview of the Iraqi oil sector, see EIA's Iraq Country Analysis Brief.

Price Movements

Daily Price Information	Week Prior (3/12)	Day #1 (3/19)	Latest (4/28)
WTI Futures Price ($/bbl)	37.83	29.88	25.49
U.S. Weekly Price Survey	Monday Prior (3/17)	Week #1 (Monday 3/24)	Latest (Monday 4/28)
Retail Regular Gasoline (cents/gallon)	172.8	169.0	155.7

Note: EIA collects a national survey of regular retail gasoline prices every Monday. The current oil supply disruption is not the only factor affecting prices. For more information concerning EIA price statistics and analysis, see: This Week in Petroleum.

Oil Market Highlights

OPEC Crude Oil Production[1] (Thousand barrels per day)

LAST UPDATED 4/29/03	November 2002 Production	March 2003 Production	Current Production	Current Production Capacity[2]	Current Surplus Capacity
Algeria	938	1,100	1,200	1,200	0
Indonesia	1,100	1,060	1,050	1,050	0
Iran	3,500	3,690	3,750	3,750	0
Kuwait[4]	1,940	2,400	2,450[3]	2,450[3]	0
Libya	1,350	1,400	1,400	1,400	0
Nigeria	2,000	1,800	2,040	2,040	0
Qatar	695	750	750	850	100
Saudi Arabia[4]	8,100	9,500	9,600	10,000-10,500[5]	400-900[5]
UAE	2,000	2,300	2,300	2,500	200
Venezuela[6]	2,922	2,300	2,600	2,600	0
OPEC 10 Crude Oil Total	**24,545**	**26,300**	**27,140**	**27,840-28,340[5]**	**700-1,200[5]**
Iraq	2,390	1,350	235	235	0
OPEC Crude Oil Total	**26,935**	**27,650**	**27,375**	**28,075-28,575[5]**	**700-1,200[5]**

NA: Not Available
1Crude oil does not include lease condensate or natural gas liquids.
2Maximum sustainable production capacity, defined as the maximum amount of production that: 1) could be brought online within a period of 30 days; and 2) sustained for at least 90 days.
3Current Kuwaiti production includes surge production in excess of maximum sustainable levels. The Kuwaiti capacity number reflects this surge production.
4 Kuwaiti and Saudi Arabian figures each include half of the production from the Neutral Zone between the two countries. Saudi Arabian production also includes oil produced from its offshore Abu Safa field on behalf of Bahrain.
5 The amount of Saudi Arabia's spare capacity that can be brought online is shown as a range between 0.4 and 0.9 million bbl/d.
6 Venezuelan capacity and production numbers exclude extra heavy crude oil used to produce Orimulsion.

Top World Oil Net Exporters, 2002*

	Country	Net Exports (million barrels per day)
1)	Saudi Arabia	6.76
2)	Russia	5.03
3)	Norway	3.14
4)	Iran	2.30
5)	Venezuela	2.26
6)	United Arab Emirates	1.95
7)	Nigeria	1.85
8)	Kuwait	1.73
9)	Mexico	1.69
10)	Iraq	1.58
11)	Algeria	1.27
12)	Libya	1.16

**Table includes all countries with net exports exceeding 1 million barrels per day in 2002.*

During 2002, roughly half of U.S. crude oil imports came from the Western Hemisphere (18% from Canada, 16% from South America, 12% from Mexico, 1% from the Caribbean), while approximately one-fifth came from the Persian Gulf region (15% from Saudi Arabia, 4% from Iraq, 2% from Kuwait).

In general, OECD Europe depends far more heavily on the Persian Gulf and North Africa for oil imports than does the United States. Japan receives over three-quarters of its oil supplies from the Persian Gulf (mainly the UAE, Saudi Arabia, Kuwait, Iran, and Qatar) with the remainder coming from Indonesia, China, and other sources.

Major Sources of U.S. Net Petroleum Imports, 2002*

(all volumes in million barrels per day)

	Total Net Oil Imports	Net Crude Oil Imports	Net Petroleum Product Imports
Canada	1.83	1.42	0.41
Saudi Arabia	1.55	1.52	0.03
Venezuela	1.37	1.20	0.17
Mexico	1.28	1.49	-0.21
Nigeria	0.60	0.57	0.03
United Kingdom	0.47	0.41	0.06
Iraq	0.44	0.44	0.00
Norway	0.38	0.34	0.04
Angola	0.33	0.32	0.01
Net Imports	10.38	9.04	1.34

** Table includes all countries from which the U.S. imported more than 300,000 barrels per day of total oil in 2002.*

Having provided this information, it is important to stress that oil is a "fungible" (interchangeable, traded on a world market) commodity, that a disruption of oil flows anywhere will affect the price of oil everywhere, and that the specific suppliers of oil to a particular country or region are not of enormous significance, at least from an economic point of view.

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Latest U.S. Weekly EIA Petroleum Information

(last complete update: April 24, 2003)

Click here for the latest U.S. weekly data on petroleum supply and demand.

Petroleum Inventories
With record imports and a decline in refinery inputs, U.S. commercial crude oil inventories (excluding those in the Strategic Petroleum Reserve) increased by 9.0 million barrels last week, but are still 41.6 million barrels less than last year at this time. Over the last four weeks, crude oil inventories have increased by 12.3 million barrels. Even with an increase in refinery output and strong imports, motor gasoline inventories fell by 0.7 million barrels and are below the low end of the normal range. Distillate fuel inventories, however, increased by 0.4 million barrels, with an increase in low-sulfur distillate fuel of 1.4 million barrels more than compensating for a decrease in high-sulfur distillate fuel of 1.1 million barrels. As of April 18, total commercial petroleum inventories are 117.5 million barrels less than last year at this time.

Petroleum Imports
U.S. crude oil imports averaged 10.6 million barrels per day last week, the most ever imported in any given week. Crude oil imports have averaged 9.8 million barrels per day over the last four weeks, which is about 900,000 barrels per day more than averaged over the same period last year. Although the origins of weekly crude oil imports are preliminary and thus not published, it appears that imports from Iraq and Canada were relatively high last week compared to typical levels, while imports from many countries increased considerably from the previous week. Total motor gasoline imports (including both finished gasoline and gasoline blending components) continue to pour in, averaging more than 1.0 million barrels per day last week, while distillate fuel imports averaged 200,000 barrels per day.

Final monthly data on the origins of U.S. crude oil imports in February 2003 has been released and it shows that three countries each exported about 1.4 million barrels per day or more of crude oil to the United States (see table below). The top sources of U.S. crude oil imports in February 2003 were: Mexico (1.495 million barrels per day), Canada (1.423 million barrels per day), and Saudi Arabia (1.397 million barrels per day). Rounding out the top ten sources, in order, were Iraq (0.909 million barrels per day), Venezuela (0.559 million barrels per day), Nigeria (0.494 million barrels per day), United Kingdom (0.407 million barrels per day), Angola (0.251 million barrels per day), Colombia (0.240 million barrels per day), and Kuwait (0.223 million barrels per day). Imports from Venezuela were up from January's level, which was the lowest level since February 1989, but still significantly less than normal, as Venezuelan exports were severely curtailed for much of February following the general strike in that country. Imports from Iraq during February averaged the most since January 2002. Total crude oil imports averaged 8.303 million barrels per day in February, a decline of 244,000 barrels per day from January, and represents the lowest level since December 1999. The top three origins accounted for 52 percent of U.S. crude oil imports in February, while the top ten sources accounted for 89 percent of all U.S. crude oil imports.

Refinery Inputs and Production
U.S. crude oil refinery inputs decreased to 15.3 million barrels per day during the week ending April 18, down over 100,000 barrels per day from the previous week. However, despite the decline, refinery output of distillate fuel and motor gasoline increased significantly, while jet fuel output was down slightly compared to the previous week.

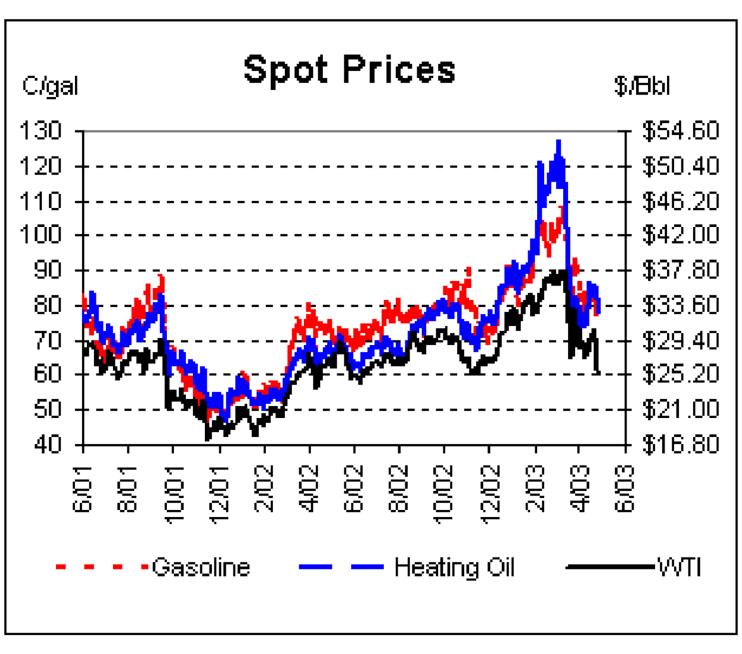
Petroleum Demand
Total product supplied over the last four-week period averaged over 19.9 million barrels per day, or about 2.5 percent more than the same period last year. Over the last four weeks, motor gasoline demand is down 2.1 percent, while distillate fuel demand is up 3.1 percent compared to the same period last year. Kerosene-type jet fuel demand is 2.5 percent less than last year over the same four-week period.

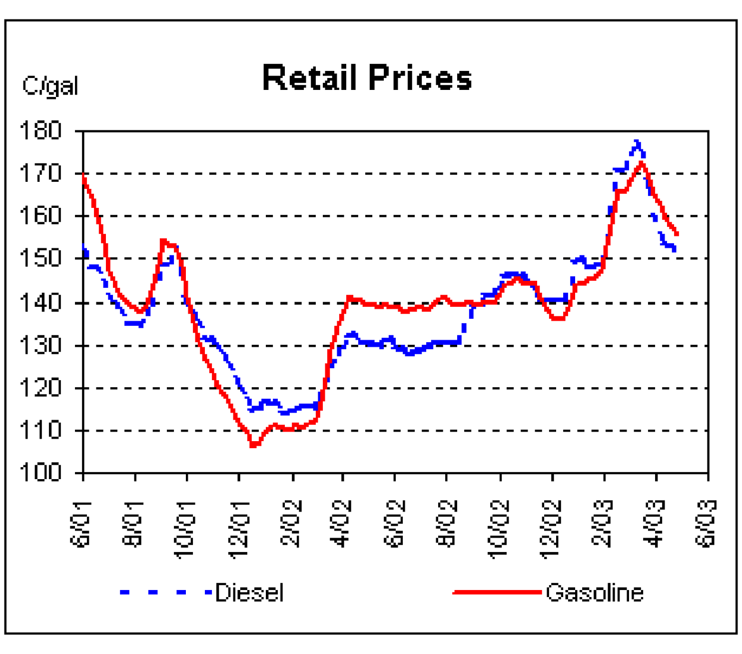
U.S. Retail Gasoline Prices Continue to Drop (updated April 28)
The U.S. average retail price for regular gasoline fell last week for the sixth week in a row. Prices dropped by 1.7 cents per gallon as of April 28 to hit 155.7 cents per gallon, which is still 16.4 cents per gallon higher than a year ago. Over the last five weeks, the average price for regular gasoline has declined by 17.1 cents per gallon. The recent reductions in gasoline prices are largely due to continuing decreases in crude oil prices. Prices were down throughout the nation last week. The region with the lowest price is the Gulf Coast, where prices for regular gasoline averaged 143.7 cents per gallon, while the region with the highest price is the West Coast, where prices for regular gasoline averaged 188.1 cents per gallon on April 28. However, the West Coast also saw the largest price decrease, with prices falling 3.1 cents over the last week. California fell below $2 per gallon after 8 straight weeks above that mark, decreasing by 3.2 cents to 197.7 cents per gallon.

Retail diesel fuel prices decreased for the sixth consecutive week, falling 2.1 cents per gallon as of April 28 to a national average of 150.8 cents per gallon, which is still 20.6 cents per gallon higher than a year ago. Diesel fuel prices are down in conjunction with recent drops in crude oil prices and in anticipation of weaker market conditions. Retail diesel prices were down throughout the nation last week. The region with the lowest price is the Gulf Coast, where prices for diesel averaged 141.9 cents per gallon, while the region with the highest price is New England, where prices averaged 166.2 cents per gallon on April 28.

U.S. Petroleum Prices

(updated April 29, 2003)





Crude Oil and Oil Products Price Table

Date	WTI Crude Oil Spot Cushing	WTI Crude Oil Futures	Gasoline Spot NYH	Gasoline Futures	Heating Oil Spot NYH	Heating Oil Futures	Kerojet Spot NYH	Propane Spot Mt. Belvieu	Propane Spot Conway	EIA Weekly Retail US Average Gasoline	EIA Weekly Retail US Average Diesel
	$/bbl	$/bbl	cents per gallon		cents per gallon		c/gal	cents per gallon		cents per gallon	
3/11/2003	$36.81	$36.72	103.70	109.87	116.60	103.02	114.10	65.38	58.25		
3/12/2003	$37.87	$37.83	105.08	111.39	115.45	103.52	112.45	64.50	57.38		
3/13/2003	$36.05	$36.01	99.38	105.77	106.84	96.71	103.84	62.50	54.94		
3/14/2003	$35.41	$35.38	98.75	104.04	102.30	94.07	98.55	60.13	53.25		
3/17/2003	$34.92	$34.93	95.97	102.71	95.70	91.57	92.95	61.63	56.50	172.8	175.2
3/18/2003	$31.55	$31.67	91.10	96.19	90.45	85.78	90.20	59.38	52.38		
3/19/2003	$30.01	$29.88	89.39	94.25	88.55	83.61	88.30	58.38	53.19		
3/20/2003	$28.62	$28.61	85.85	90.99	88.00	82.44	87.50	57.88	53.50		
3/21/2003	$27.18	$26.91	80.10	85.25	78.75	75.56	79.75	55.25	53.69		
3/24/2003	$29.51	$28.66	84.58	89.79	80.45	78.37	82.70	56.63	54.75	169.0	166.2
3/25/2003	$33.42	$27.97	83.25	88.49	75.85	73.49	76.85	57.00	54.75		
3/26/2003	$28.71	$28.63	88.75	92.42	75.55	74.41	76.05	55.38	53.25		
3/27/2003	$30.31	$30.37	92.75	97.47	81.00	81.15	81.75	54.75	52.07		
3/28/2003	$30.21	$30.16	91.05	95.39	82.08	83.25	83.70	52.63	51.82		
3/31/2003	$31.14	$31.04	90.92	94.44	79.62	79.24	80.12	51.82	49.94	164.9	160.2
4/1/2003	$29.48	$29.78	86.24	91.42	75.78	74.09	76.65	50.38	49.63		
4/2/2003	$28.55	$28.56	81.90	86.39	73.90	71.86	74.15	48.50	48.50		
4/3/2003	$29.05	$28.97	81.83	87.16	75.30	73.17	75.55	48.38	48.38		
4/4/2003	$28.41	$28.62	81.35	87.03	74.90	72.60	75.40	47.88	48.00		
4/7/2003	$27.76	$27.96	78.05	84.25	74.43	71.64	75.80	47.25	47.38	163.0	155.4
4/8/2003	$27.97	$28.00	78.80	83.84	75.43	71.80	76.80	48.01	47.38		
4/9/2003	$28.93	$28.85	83.50	87.57	77.50	74.29	79.25	48.94	49.25		
4/10/2003	$27.20	$27.46	78.54	83.46	74.30	71.61	74.80	48.94	49.75		
4/11/2003	$28.28	$28.14	80.53	85.04	79.10	72.45	79.10	49.50	50.13		
4/14/2003	$28.41	$28.63	79.53	84.91	81.18	74.75	80.56	50.50	51.38	159.5	153.9
4/15/2003	$29.46	$29.29	81.70	85.88	86.00	77.26	86.00	51.38	52.50		
4/16/2003	$29.16	$29.18	81.43	87.27	83.98	76.49	81.60	51.44	53.00		
4/17/2003	$30.10	$30.55	84.68	90.66	83.33	77.36	81.95	51.88	50.75		
4/18/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA		
4/21/2003	$30.76	$30.87	83.96	90.98	84.79	80.08	84.29	53.25	52.50	157.4	152.9
4/22/2003	$29.92	$29.91	81.00	87.74	85.20	77.86	83.45	53.25	52.25		
4/23/2003	$28.04	$26.65	78.35	84.81	82.20	75.07	79.95	52.13	51.25		
4/24/2003	$27.52	$26.64	79.10	87.93	83.30	77.30	81.80	51.88	51.25		
4/25/2003	$25.92	$26.26	78.38	88.36	82.05	76.60	80.80	52.25	51.75		
4/28/2003	$25.25	$25.49	74.00	84.24	78.20	73.14	76.45	51.25	50.25	155.7	150.8

Source: Spot and futures closing quotes as reported by Reuters News Service, retail prices reported by EIA

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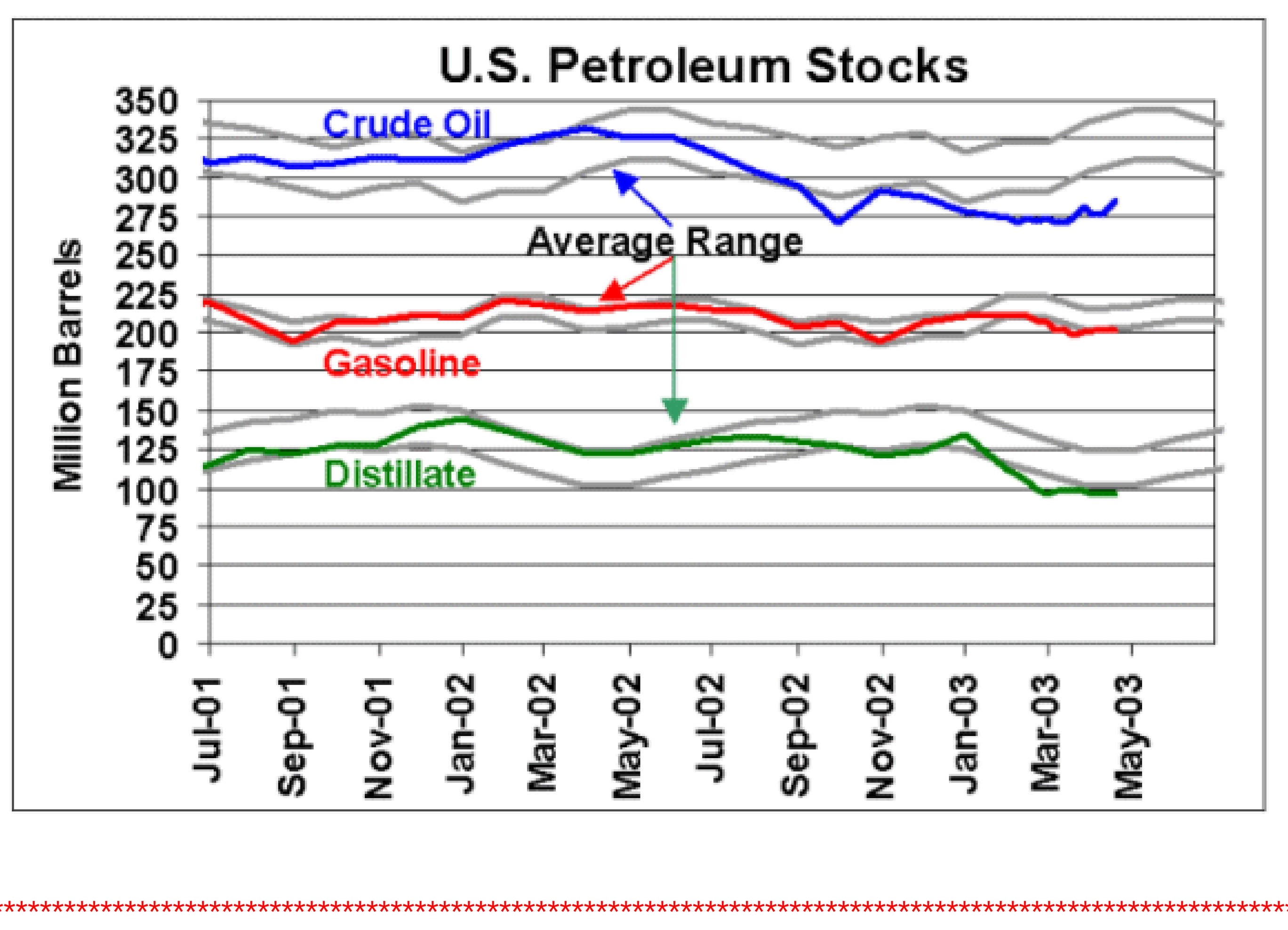
U.S. Petroleum Supply

(Thousand Barrels per Day)	Four Weeks Ending 4/18/2003	Four Weeks Ending 4/18/2002	vs. Year Ago Diff.	vs. Year Ago % Diff.
Refinery Activity				
Crude Oil Input	15,332	14,986	346	2.3%
Operable Capacity	16,800	16,786	14	0.1%
Operable Capacity Utilization (%)	92.3%	90.8%	1.5%	
Production				
Motor Gasoline	8,095	8,397	-302	-3.6%
Jet Fuel	1,443	1,496	-53	-3.5%
Distillate Fuel Oil	3,660	3,522	138	3.9%
Imports				
Crude Oil (incl. SPR)	9,824	8,948	877	9.8%
Motor Gasoline	1,005	822	183	22.3%
Jet Fuel	76	120	-44	-36.7%
Distillate Fuel Oil	249	227	22	9.8%
Total	12,229	11,301	928	8.2%
Exports				
Crude Oil	10	8	2	25.0%
Products	965	867	98	11.2%
Total	975	875	100	11.4%
Products Supplied				
Motor Gasoline	8,530	8,709	-179	-2.1%
Jet Fuel	1,590	1,630	-40	-2.5%
Distillate Fuel Oil	3,896	3,778	118	3.1%
Total	19,939	19,457	482	2.5%

Stocks (Million Barrels)	4/18/2003	4/18/2002	vs. Year Ago Diff.	vs. Year Ago % Diff.
Crude Oil (excl. SPR)	286.2	327.8	-41.6	-12.7%
Motor Gasoline	201.2	215.3	-14.1	-6.5%
Jet Fuel	35.5	40.9	-5.4	-13.2%
Distillate Fuel Oil	96.1	122.8	-26.7	-21.7%
Total (excl. SPR)	899.2	1,016.7	-117.5	-11.6%



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Energy Situation Analysis Report: Special Topic Reports

- The War’s Impact on Gasoline Prices An analysis of the Iraq war's impact on U.S. gasoline prices, and the dynamics between crude and product prices. (*March 25, 2003*)
- Key Iraqi Oil Infrastructure Information (*March 24, 2003*)

A summary of the most important information related to Iraq's oil reserves, oil fields, wells, production capacity, export infastructure, refiining sector, and post-war development plans.
- Oil Market Status Prior to Iraq Disruption *(March 20, 2003)*

An overview of the world oil situation prior to the current warfare in Iraq. Attempts to answer the question: "how did we get to this point, and what may happen next?"
- Past Oil Supply Disruptions (*March 18, 2003*)

A historical review of major past oil supply disruptions, including the 1973 Arab oil embargo, the 1979 Iranian Revolution, the 1980 outbreak of the Iran-Iraq War, and the 1990-1991 Gulf War.
- Basic Facts on Venezuela (*December 17, 2002*)

A fact sheet on Venezuela, providing historical oil production and export information, as well as a table showing US dependency on Venezuelan oil imports.

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Historical Comparison: Arab Oil Embargo (10/73)

Historical Comparison: Iranian Revolution (10/78)

Historical Comparison: Iran/Iraq War Outbreak (9/80)

Historical Comparison: Gulf War Outbreak (8/90)

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Special Topics: The War's Impact on Gasoline Prices (March 25, 2003)

As of Monday, March 24, EIA's weekly survey of retail gasoline prices showed the U.S. average price for regular grade at $1.690 per gallon, down from $1.728 per gallon the previous week, the highest nominal (not inflation-adjusted) national average price on record. With prices this high, and months to go before the summer driving season (traditionally the time of highest gasoline demand and prices), many people are understandably concerned about the potential impact on gasoline prices of the war in Iraq. Some also note the wide variations in crude oil and wholesale gasoline prices from week to week, or even day to day, and wonder how quickly increases (or reductions) can be expected to show up at the pump.

The effect of the war on prices for crude oil and petroleum products, including gasoline, is likely to depend mostly on how events unfold, particularly in terms of the scope and duration of any interruption to world oil supplies. The commencement of military action has to date affected oil production only in and near the combat region. For the time being, EIA is assuming that the flow of legal Iraqi oil exports has been effectively stopped. Kuwait has reportedly reduced production at certain northern oil facilities, but offset this with increases elsewhere, yielding no net change. Iran has reportedly shut in production from its offshore Soroosh field in the Persian Gulf. In total, the gross Middle Eastern oil supply disruption is estimated at 1.8 million barrels per day (MMBD). (This estimate is prior to excess production capacity being brought online by other countries). At present, promises of increased supplies from OPEC, especially Saudi Arabia, appear to be perceived by markets as sufficient to offset the temporary loss of Iraqi (and some Kuwaiti and Iranian) production, as evidenced by price movements to date. In fact, after rising nearly 50 percent since mid-November 2002, reflecting both tight global supplies and uncertainty over the possibility of war, prices fell as much as $10 per barrel in just over a week leading up to, and including, the first few days of battle.

In addition to the war in Iraq, other events continue to have substantial impact on world oil markets. Oil exports from Venezuela, a major exporter and OPEC member, remain at reduced levels as that country continues to recover from a general strike that began in early December 2002. Though official and unofficial estimates vary, Venezuelan production continues to run as much as 600,000 barrels per day lower than pre-strike levels. More recently, civil unrest in portions of Nigeria has reduced crude oil production from that OPEC member country by about 900,000 barrels per day. Problems in both of these countries have disproportionate effects on the United States, because they are among the relatively "short-haul" Atlantic Basin crude oil sources favored by refiners on the U.S. East and Gulf Coasts.

Higher crude oil prices exert upward influence on gasoline prices in two ways: a direct pass-through to all petroleum products, because crude oil is the primary feedstock to refineries; and inflation of refinery margins, because of the secondary effects of crude oil prices on refinery economics. Increases or decreases in crude oil prices, which are dependent on global supply and demand, translate almost instantly into changes in wholesale petroleum product prices, particularly in the spot and futures markets. (Each $1-per-barrel change in crude oil prices equates to a change in product prices of about 2.4 cents per gallon).

The other major component of gasoline price changes impacted by crude oil is refining margins, the difference between product prices and crude oil prices. When the supply/demand balance for a product is tighter than that for crude oil, refining margins are pushed higher. The balance can tighten because of rising demand, reduced production or imports, or a combination of these. This has recently been the case due to low U.S. crude oil inventories, which have begun to constrain refinery runs, in addition to reduced gasoline imports related to the Venezuelan strike. Additionally, high crude oil prices are often accompanied by "backwardation" in futures markets, where prices for commodities to be delivered in later months are lower than those for immediate delivery. Such a situation provides a disincentive for refiners to purchase and refine high-priced crude oil now, to be delivered as lower-priced products later.

The two components discussed above, crude oil prices and refining margins, add up to the spot market price of gasoline. Changes in spot prices are passed through to retail prices over a period of weeks, with about two-thirds of the impact of spot price changes arriving at the retail level within two weeks. Thus, unless counteracted by other influences more specific to gasoline, changes in crude oil prices can be expected to show up in retail gasoline prices, at the rate of about 2½ cents per gallon of gasoline for each $1 per barrel in crude oil price, within a matter of weeks. Because this "pass-through" of price changes from crude oil to wholesale and then retail gasoline markets is relatively consistent, EIA has found that near-term retail gasoline prices can be predicted with accuracy using recent spot price data.

When will last week's $10-per-barrel drop in crude oil prices show up at the gasoline pump? The answer lies in the lagging nature of price pass-through, and is not as simple as it may sound. Because the impact of a sudden change in spot prices is passed through to retail markets over a period of weeks, there can often be conflicting influences being passed through at the same time, especially when wholesale prices have quickly reversed direction. The current situation is a perfect case in point: gasoline spot prices had only peaked two weeks ago, so a portion of last week's sharp spot price decline, along with a lagging part of the previous increase, were both contributing to retail price movements this week. As a result, the downward movement was partially offset by the upward, yielding a net retail price decline of 3.8 cents per gallon for the week (note: this refers to the national average retail price for regular gasoline; prices can vary considerably on a regional basis because of differing logistical costs and product specifications).

Although it is impossible to predict spot market behavior over the coming weeks, it is likely that we will continue to see some conflicting influences on retail gasoline prices as the spring proceeds.

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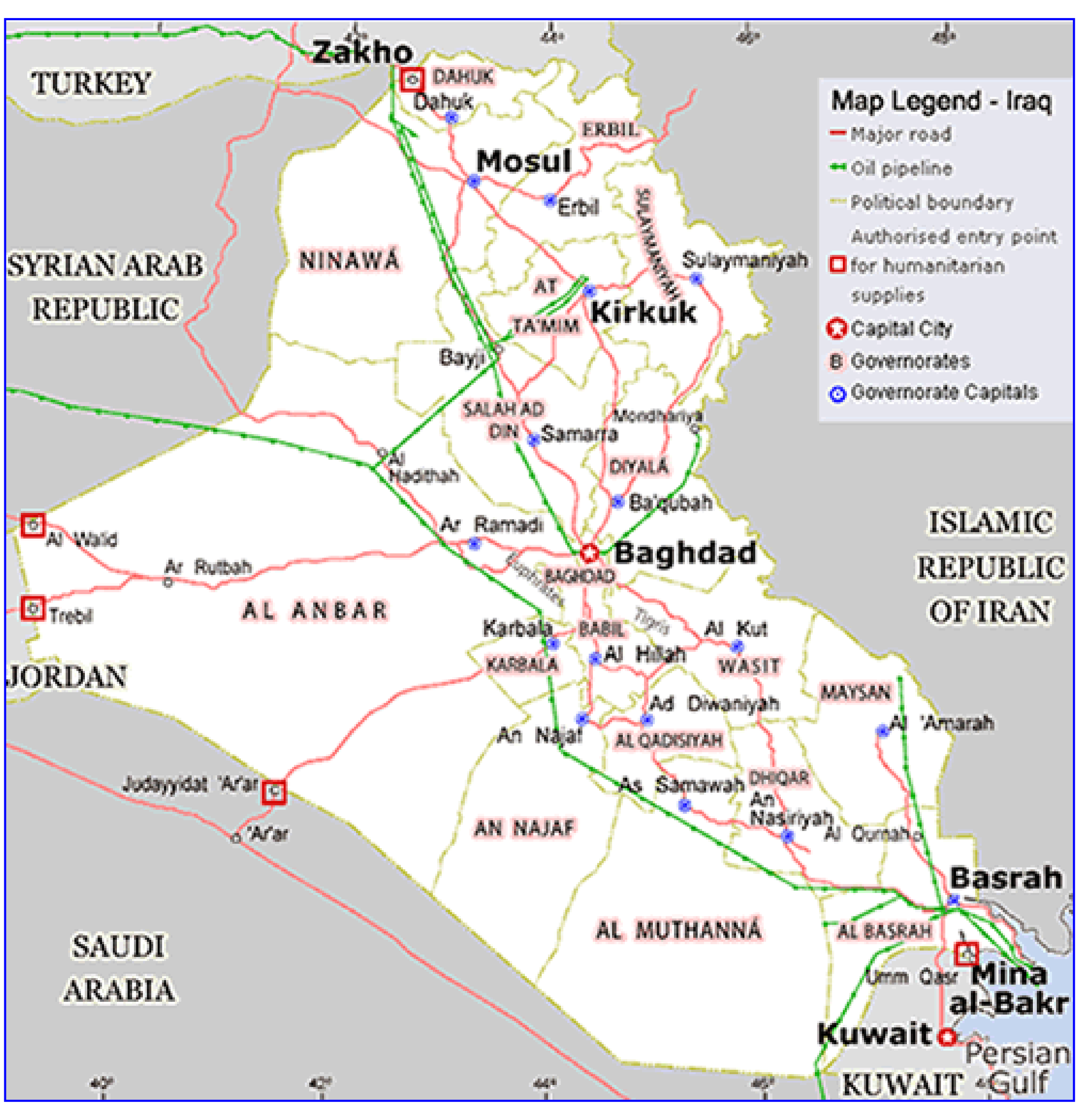
Special Topics: Key Iraqi Oil Infrastructure Information (March 23, 2003)



Iraq's Oil Reserves, Fields, Wells
Iraq contains 112 billion barrels of proven oil reserves, the second largest in the world (behind Saudi Arabia). Iraq's true resource potential may be far greater than this, however, as the country is largely (90% or so) unexplored due to years of war and sanctions. Deep oil-bearing formations located mainly in the vast Western Desert region, for instance, could yield large additional oil resources (possibly another 100 billion barrels), but have not been explored. Iraq's oil production costs are amongst the lowest in the world, making it a highly attractive oil prospect. However, only 15 of 73 discovered fields have been developed, while few deep wells have been drilled compared to Iraq's neighbors.

Overall, only about 2,000 wells reportedly have been drilled in Iraq (of which about 1,500-1,700 are actually producing oil), compared to around 1 million wells in Texas for instance. In addition, Iraq generally has not had access to the latest, state-of-the-art oil industry technology (i.e., 3D seismic), sufficient spare parts, and investment in general throughout most of the 1990s, but has instead reportedly been utilizing questionable engineering techniques (i.e., overpumping, water injection/"flooding") and old technology to maintain production.

Iraqi oil reserves vary widely in quality, with API gravities in the 22º to 35º range. Iraq's main export crudes come from the country's two largest active fields: Rumaila and Kirkuk. The southern Rumaila field, which extends a short distance into Kuwaiti territory, has around 663 wells and produces three streams: Basra Regular; Basra Medium (normally 30º API, 2.6% sulfur); and Basra Heavy (normally 22º-24º API, 3.4% sulfur). Basrah Blend normally averages around 32º API, 1.95% sulfur, but reportedly is worse currently at around 29-30º API and 2%+ sulfur content. As of March 23, 2003, around 9 oil wells at Rumaila reportedly were on fire, with firefighters reportedly dispatched to deal with the problem, and outside analysts describing the problem as "minor" in nature.

The northern Kirkuk field, first discovered in 1927, has around 337 wells and normally produces 35º API, 1.97% sulfur crude, although the API gravity and sulfur content both are reported to have deteriorated sharply in recent months. Kirkuk's gravity, for instance, has declined to around 32-33º API, while sulfur content has risen above 2%. Declining crude oil qualities -- and an increased "water cut" as well -- could be the result of overpumping as Iraq attempts to sell as much oil as possible. An additional export crude, known as "Fao Blend," is heavier and more sour, with a 27º API and 2.9% sulfur. As of March 23, 2003, no oil well fires or other damage had been reported at Kirkuk.

Iraq's Pre-War Production and Export Capacity
Oil industry experts generally assess Iraq's sustainable production capacity at no higher than about 2.8-2.9 million bbl/d, with net export potential of around 2.3-2.5 million bbl/d (including smuggled oil). In comparison, Iraq produced 3.5 million bbl/d in July 1990. Approximately 2 million bbl/d of Iraq's production capacity comes from oil fields in the southern part of the country, particularly North and South Rumaylah (1.3 million bbl/d), West Qurnah (225,000 bbl/d), Az Zubair (220,000 bbl/d), Majnoon (50,000 bbl/d), Jabal Fauqi (50,000 bbl/d), Abu Ghurab (40,000 bbl/d), Buzurgan (40,000 bbl/d) and Luhais (30,000 bbl/d). Iraq's remaining oil production capacity is located in the northern and central fields of Kirkuk (720,000 bbl/d), Bai Hassan (100,000 bbl/d), Jambur (50,000 bbl/d), Khabbaz (40,000 bbl/d), Saddam (30,000 bbl/d), East Baghdad (20,000 bbl/d), and 'Ayn Zalah (10,000 bbl/d).

Iraq's Oil Export Pipelines/Terminals
Iraq's oil export infrastructure (pipelines, ports, pumping stations, etc.) were damaged in both the Iran-Iraq War as well as Operation Desert Storm (1991). Currently, the 600-mile, 40-inch Kirkuk-Ceyhan pipeline is Iraq's largest operable crude export pipeline. This Iraq-Turkey link consists has a fully-operational apacity of 1.1 million bbl/d, but reportedly can handle only around 900,000 bbl/d currently. A second, parallel, 46-inch line has an optimal capacity of 500,000 bbl/d and was designed to carry Basra Regular exports, but at last report was inoperable. Combined, the two parallel lines have an optimal capacity of 1.5-1.6 million bbl/d. According to *Reuters*, as of March 23, 2003, the Kirkuk-Ceyhan pipeline was operational and still pumping oil, but storage tanks at Ceyhan were nearly full and no tankers were scheduled to load.

On August 20, 1998, Iraq and Syria (which reopened their border in June 1997 -- after a 17-year closure -- for trade and official visits) signed a memorandum of understanding for the possible reopening of the 50-year-old, rusting Banias oil pipeline from Iraq's northern Kirkuk oil fields to Syria's Mediterranean port of Banias (and Tripoli, Lebanon). As of October 2002, the pipeline reportedly was being used (see above), and there also was talk of building a new, parallel pipeline as a replacement.

In order to optimize export capabilities (i.e., to allow oil shipments to the north or south), Iraq constructed a reversible, 1.4-million bbl/d "Strategic Pipeline" in 1975. This pipeline consists of two parallel 700,000-bbl/d lines. The North-South system allows for export of northern Kirkuk crude from the Persian Gulf and for southern Rumaila crudes to be shipped through Turkey. During the Gulf War, the Strategic Pipeline was disabled after the K-3 pumping station at Haditha as well as four additional southern pumping stations were destroyed.

In the Persian Gulf, Iraq has three tanker terminals: at Mina al-Bakr; Khor al-Amaya; and Khor az-Zubair (which mainly handles dry goods and minimal oil volumes). All of these ports, as well as other oil infrastructure (tanks, pipelines, etc.) in the area, reportedly were undamaged and under the control of coalition forces within the first few days of war in late March 2003. Mina al-Bakr is Iraq's largest oil terminal, with four 400,000-bbl/d-capacity, offshore berths capable of handling very large crude carriers (VLCCs). Gulf War damage to Mina al-Bakr appears to have been repaired in large part and the terminal currently can handle up to 1.2-1.3 million bbl/d. A full return to Mina al-Bakr's nameplate capacity apparently would require extensive infrastructure repairs. Mina al-Bakr also is constrained by a shortage of storage and oil processing facilities, most of which were destroyed in the Gulf War.

Iraq's Khor al-Amaya terminal was heavily damaged during the Iran-Iraq War (and completely destroyed during Operation Desert Storm in 1991) and has been out of commission since then. As of March 2001, reports indicated that Iraq had largely completed repairing two berths at Khor al-Amaya. Upon full completion of repairs, Iraq projects Khor al-Amaya's capacity will rise to 1.2 million bbl/d, and will help prevent delays at Mina al-Bakr while repairs are conducted there.

Post-War Oil Development Plans, Pre-War Oil Deals with International Oil Companies
In December 2002, the Council of Foreign Relations and the Baker Institute released a report on Iraq's oil sector. Among other things, the report concluded that: 1) Iraq's oil sector infrastructure is in bad shape at the moment, being held together by "band-aids," and with a production decline rate of 100,000 bbl/d per year; 2) increasing Iraqi oil production will require "massive repairs and reconstruction...costing several billions of dollars and taking months if not years;" 3) costs of repairing existing oil export installations alone would be around $5 billion, while restoring Iraqi oil production to pre-1990 levels would cost an additional $5 billion, plus $3 billion per year in annual operating costs; 4) outside funds and large-scale investment by international oil companies will be needed; 5) existing oil contracts will need to be clarified and resolved in order to rebuild Iraq's oil industry, with any "prolonged legal conflicts over contracts" possibly "delay[ing] the development of important fields in Iraq;" and 6) any "sudden or prolonged shut-down" of Iraq's oil industry could result in long-term reservoir damage; 7) Iraq's oil facilities could easily be damaged during any domestic unrest or military operations (in early February 2003, the Patriotic Union of Kurdistan claimed that Iraqi soldiers were mining oil wells in the north of the country in anticipation of war); and 8) given all this, a "bonanza" of oil is not expected in the near future.

According to the Middle East Economic Survey (MEES), problems at Iraqi oil fields include: years of poor oil reservoir management; corrosion problems at various oil facilities; deterioration of water injection facilities; lack of spare parts, materials, equipment, etc.; damage to oil storage and pumping facilities; and more. MEES estimates that Iraq could reach production capacity of 4.2 million bbl/d within three years at a cost of $3.5 billion, and 4.5-6.0 million bbl/d within seven years.

As of October 2002, Iraq reportedly had signed several multi-billion dollar deals with international oil companies (IOCs), mainly from China, France, and Russia. Deutsche Bank estimates $38 billion total on new fields -- "greenfield" development -- with potential production capacity of 4.7 million bbl/d if all the deals come to fruition (which Deutsche Bank believes is highly unlikely). Iraq reportedly has become increasingly frustrated at the failure of these companies actually to begin work on the ground, and has threatened to no longer sign deals unless firms agreed to do so without delay. Iraqi upstream oil contracts generally require that companies start work immediately, but U.N. sanctions overwhelmingly have dissuaded companies from doing so. In 1992, Iraq announced plans to increase its oil production capacity to over 6.3 million bbl/d following the lifting of U.N. sanctions. This plan, which was to be accomplished in three phases over a five-year period, assumed billions of dollars worth of foreign investment. Much of the production was to come from giant fields in the south (Halfaya, Majnoon, Bin Umar, West Qurna), plus the Mishrif reservoir (Luhais, North and South Rumaila, Zubair, etc.), East Baghdad, and others.

Russia, which is owed billions of dollars by Iraq for past arms deliveries, has a strong interest in Iraqi oil development. This includes a $3.7 billion, 23-year deal to rehabilitate Iraqi oilfields, particularly the 11-15 billion barrel West Qurna field (located west of Basra near the Rumaila field). West Qurna is believed to have production potential of 800,000-1 million bbl/d. In a surprising and somewhat puzzling development, in mid-December 2002 the Iraqi Oil Ministry announced that it was severing its contract with the Lukoil consortium on West Qurna due to "fail[ure] to comply" with contract stipulations. Specifically, the Iraqis cited Lukoil's failure to invest a required $200 million over three years. Two other, smaller, stakes in West Qurna by Russian companies Zarubezhneft and Mashinoimport reportedly were left intact. In addition, three exploration and production deals were signed between Iraq and Russian companies (Soyuzneftegaz, Stroytransgas-Oil, and Tatneft, to develop the 100,000-bbl/d Rafidain field, the Western Desert's Block 4, and the Western Desert's Block 9, respectively). Despite all this, Russia's Foreign Ministry said that it viewed the Iraqi decision on Lukoil and West Qurna "with regret." In mid-February 2003, following a month of talks between the two sides aimed at reversing Iraq's decision, the Iraqis announced that its decision to cancel the Lukoil deal was "finished and the contract has been scrapped."

In October 2001, a joint Russian-Belarus oil company, Slavneft, signed a $52 million service contract with Iraq on the 2-billion-barrel, Suba-Luhais field in southern Iraq. Full development of Suba-Luhais could result in production of 100,000 bbl/d (35º API) at a cost of $300 million over three years. As of March 2002, Slavneft reportedly was awaiting approval from the United Nations to drill 25 wells as Luhais.

The Saddam field contains 3 billion barrels of oil and 5 trillion cubic feet (Tcf) of associated gas. Iraq is seeking foreign assistance for a second-phase Saddam development, which would raise oil production capacity to 50,000 bbl/d, as well as 300 Mmcf/d of gas. In early April 2001, Russia's Zarubezhneft received U.N. approval to drill 45 wells in the Saddam field, plus Kirkuk and Bai Hassan, as part of an effort to reduce water incursion into the fields.

The largest of Iraq's oilfields slated for post-sanctions development is Majnoon, with reserves of 12-30 billion barrels of 28-35º API oil, and located 30 miles north of Basra on the Iranian border. The oil major Total reportedly has a deal with Iraq on development rights for Majnoon. Majnoon was reportedly brought onstream (under a "national effort" program begun in 1999) in May 2002 at 50,000 bbl/d, with output originally projected to reach 100,000 bbl/d by the end of 2002 (according to Oil Minister Rashid). Future development on Majnoon ultimately could lead to production of 450,000 bbl/d within two years or so at an estimated (according to Deutsche Bank) cost of $4 billion. Eventually, Majnoon could produce significantly more oil than that, possibly well above 1 million bbl/d.

In July 2001, angered by France's perceived support for the U.S. "smart sanctions" plan, Iraq announced that it would no longer give French companies priority in awarding oil contracts, and would reconsider existing contracts as well. Iraq also announced that it was inclined to favor Russia, which has been supporting Iraq at the U.N. Security Council, on awarding rights to Majnoon and another large southern oil field, Bin Umar. As of February 2003, Russian company Zarubezhneft reportedly was negotiating a contract to develop Bin Umar. The status of TotalFinaElf, which had previously expressed interest in the field, was not clear. In February 2003, TotalFinaElf said that it was confident regarding its Majnoon contract, regardless of the Iraqi government in power.

The 2.5-5 billion-barrel Halfaya project is the final large field development in southern Iraq. Several companies (BHP, CNPC, Agip) reportedly have shown interest in Halfaya, which ultimately could yield 200,000-300,000 bbl/d in output at a possible cost of $2 billion.

Smaller fields with under 2 billion barrels in reserves also are receiving interest from foreign oil companies. These fields include Nasiriya (Eni, Repsol), Tuba (ONGC, Sonatrach, Pertamina), Ratawi (Shell, Petronas, CanOxy), Gharaf (Mashinoimport, Rosneftegasexport), Amara (PetroVietnam), Noor (Syria), and more. Italy's Eni and Spain's Repsol appear to be strong possibilities to develop Nassiriya

Iraq's Refining Sector
Iraq's refining capacity as of January 2003 was believed to be over 417,000 bbl/d, compared to a pre-Gulf War, nameplate capacity of 700,000 bbl/d. Iraq has 10 refineries and topping units. The largest are the 150,000-bbl/d Baiji North, 140,000-bbl/d (or higher) Basra, and 100,000-bbl/d Daura plants. During the Gulf War, both Baiji in northern Iraq as well as the refineries at Basra, Daura, and Nasiriyah were severely damaged. Today, a lack of light-end products, low quality gasoline, and rising pollution levels because of a lack of water treatment facilities are some problems faced by Iraq's refining sector. Post-sanction plans had included attracting hundreds of millions of dollars worth of foreign investment in order to upgrade dozens of downstream (refining, pipelines, natural gas processing) facilities. Also, Iraq had planned to build a new $1 billion, 290,000-bbl/d "Central" refinery near Babylon.

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File last modified: March 23, 2003

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Definitions

Petroleum

WTI – West Texas Intermediate (for the purposes of this table, prices provided are near month futures price) Cushing OK.

Bbl – Barrel (42 gallons).

C's – cents.

Natural Gas

Henry Hub – A pipeline hub on the Louisiana Gulf coast. It is the delivery point for the natural gas futures contract on the New York Mercantile Exchange (NYMEX).

Electricity

COB – average price of electricity traded at the California-Oregon and Nevada-Oregon border.

Palo Verde - average price of electricity traded at Palo Verde and West Wing Arizona.

Average - average price of electricity traded at all locations.

Special Topic -- Oil Market Status Prior to Iraq Disruption

(updated March 20, 2003)

Between February 3 and February 10, the U.S. average retail price for regular gasoline rose by 8.0 cents per gallon, which ties the largest weekly increase seen since EIA's weekly survey began in August 1990; the national average price for diesel fuel increased by 12.0 cents per gallon, another weekly record increase; residential heating oil prices increased by 18.1 cents per gallon, the largest weekly increase in 2 years; and residential propane prices increased by 4.5 cents per gallon. Since that time, product prices have continued to increase, especially for gasoline and diesel fuel. Even before Iraqi oil production and exports were disrupted, petroleum prices were high. So, how did we get to this point, and what will prices do now?

The short answer to the first part of that question is that prices were high during the first early 2003 because supplies had diminished (both for crude oil and refined products), while demand had stayed relatively strong. Crude oil, which is refined to make the petroleum products consumers use, had seen prices generally increasing since early 2002. From early 2002 to early December 2002, the West Texas Intermediate (WTI) spot crude oil price increased from about $20 per barrel to about $27 per barrel, largely as a result of low production levels from OPEC countries. While OPEC increasingly exceeded its quota over this time period, the quota (21.7 million barrels per day) was set so low that even exceeding this ceiling by 2 million barrels per day was not enough to keep crude oil prices from rising. Then, when a general strike dramatically reduced Venezuelan oil production beginning in early December 2002, global crude oil supplies dipped further, and the United States -- Venezuela's top crude oil customer -- felt this impact more than any other country. The spot price of WTI rose from around $27 per barrel prior to the Venezuelan strike to over $30 per barrel by mid-December 2002, and stayed above this level until recently. Additionally, worries about Iraq also helped to keep crude oil prices high. In summary, OPEC production levels in 2002, the Venezuelan strikes, and worries over Iraq all helped pushed crude oil and product prices higher.

Besides crude oil, product markets have tightened since mid-January 2003. Following the Venezuelan strikes, U.S. refiners were able to maintain their inputs into refineries by drawing upon their limited crude oil inventories. However, by mid-January, with U.S. crude oil inventories approaching the Lower Operational Inventory level of 270 million barrels, refiners cut back inputs significantly, beginning with the week ending January 17. As a result, with less going into refineries, output was reduced as well. Refinery production of gasoline, diesel fuel, heating fuel, and other refined petroleum products all declined beginning in the second half of January, just as demand was increasing due, in part, to cold weather in the Northeast. With refinery production continuing at relatively low rates through today and demand for petroleum products still relatively high, product inventories have been drawn down to meet the product demand, with many products now below their normal range for this time of year. Thus, product markets have also tightened, which has contributed to rising prices across many refined petroleum products.

Of course, the big question is, "What will prices do in the near future?" As always, that's a difficult question to answer. More crude oil supply appears necessary in order to produce more refined products, and also to increase crude oil inventories. Although Venezuelan production started to increase by late February and Saudi Arabia, as well as other OPEC countries, reportedly increased production in January and February, the United States has yet to see a lot of this increased oil production. As a result, crude oil inventories have been hovering just above 270 million barrels, a level below which flexibility in the crude oil system may be constrained enough to increase the likelihood of regional shortfalls. With Iraqi oil exports now disrupted, additional crude supplies will be needed just to maintain the status quo. Where product prices will head in the next several weeks, particularly for gasoline and diesel fuel, will largely depend on the amount of crude oil that is in the U.S. refining system.

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Special Topics: Current Crisis in Historical Perspective

The 1973/1974 Arab Oil Embargo

October 1973: The fourth Arabi-Israeli War breaks out on October 6. On October 16, the "Gulf Six" announce oil production cuts and unilaterally raise the posted price of Saudi Light marker crude by 70% (from $3.01 to $5.12 per barrel). On October 19-20, Arab members of OPEC declare an embargo on oil exports to the United States.

November 1973: On November 5, Arab producers announce a 25% cut in oil production below September levels (when Arab OPEC produced 19.9 million barrels per day -- MMBD). Arab OPEC produce an average of 15.5 MMBD during November (see table below), while refinery gate prices in the United States average $5.84 per barrel for the month.

December 1973: The "Gulf Six" decide to increase the posted price of marker crude by 128% (from $5.12 to $11.65 per barrel), effective January 1, 1974. Arab OPEC production remains almost constant from November, at 15.7 MMBD.

January-March 1973: OPEC decides on January 7-9 to freeze posted prices until April 1, but the imported refiner acquisition cost (IRAC) of crude oil contines to rise (to $9.59 per barrel in January and $12.45 per barrel in February), before beginning to level off in March. The oil embargo against the United States ends on March 17.

	Million Barrels per Day				Dollars per barrel
Month	**Free World Crude Oil Production**	**Gross Supply Losses**	**Supply Increase**	**Net Shortfall**	**Spot Mideast Light Price**
9/73	47.7	---	---	---	$4.78*
10/73	46.4	1.82	0.55	1.27	$5.60*
11/73	43.6	4.66	0.57	4.09	$5.84*
12/73	43.7	4.53	0.53	4.00	$7.84*
1/74	45.1	2.79	0.27	2.51	$9.59 (IRAC)
2/74	45.7	2.46	0.52	1.94	$12.45 (IRAC)
3/74	46.0	1.83	0.22	1.61	$12.73 (IRAC)

***Refinery gate price**

Crude Oil Production Increases from 9/73 Levels -- Selected Countries ('000 bbl/d)								
Month	**Iran**	**Indonesia**	**Nigeria**	**Canada**	**Mexico**	**USA**	**Other***	**Total**
October	185	57	88	67	10	159	-16	550
November	216	42	98	86	10	96	23	571
December	278	51	154	90	10	-2	-51	530
January	308	41	82	-59	34	-131	0	275
February	362	26	82	-60	34	77	-1	520
March	330	31	187	-26	70	-100	-274	218

***Not including Arab OPEC, Israel, Syria, or Egypt.**

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